

Notice of Allowability

Application No.

09/846,480

Examiner

Anh-Vu H. Ly

Applicant(s)

BELCEA, JOHN M.

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed February 22, 2006.
2. ☒ The allowed claim(s) is/are 51-53 and 55-74 renumbered as 1-23 respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Allowable Subject Matter

1. Claims 51-53 and 55-74 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art does not teach or fairly suggest means for generating routing messaging including power level set by means for setting for use in determining the connection path of a call; means for determining the optimal connection path of an outgoing call based on least energy use, so that the least amount of energy over a selected route is chosen for completing the call; and means for generating a routing table based on the class of service of data being transmitted and for reporting at least one of the following types of COS: voice type information, data type information, and video type information whereby subsequent data packets of the same type of COS are transmitted to the same destination on the same path, by a radio terminal, in an ad-hoc, peer-to-peer radio system, as specified in independent claim 51.

The prior art does not teach or fairly suggest creating in each radio terminal of the service group via software means connectivity messaging and data transfer plan messaging information for transmission in a configuration channel to other radio terminals of the service group and for receiving similar information from other radio terminals; developing by software means a utilization map, the power used for transmitting the messaging and the level of the environmental noise at the transmission site of a transmitting terminal; and using the data transfer plan information messaging for use in adjusting the transmit power level and for determining at least one routing path that matches delay requirements of a class of service of data being transferred in an ad-hoc, peer-to-peer radio system, as specified in independent claim 64.

The prior art does not teach or fairly suggest transmitting connectivity messaging using time division signaling; dedicating one of time slots of each time frame as a configuration channel in which the connectivity messaging is transmitted; transmitting information pertaining to increasing a level of transmit power according to a class of service of transmitted data and transmitting connectivity messaging of said configuration channel at a power level equal to or greater than the power level at which data information of data channels is transmitted in an ad-hoc, peer-to-peer radio system, as specified in independent claim 73.

The prior art does not teach or fairly suggest creating in each radio terminal of the service group via software means connectivity messaging and data transfer plan messaging information for transmission in a configuration channel to other radio terminals of the service group and for receiving similar information from other radio terminals; developing by software means a utilization map, the power used for transmitting the messaging and the level of the environmental noise at the transmission site of a transmitting terminal; using the data transfer plan information messaging for use in adjusting the transmit power level and for determining at least one routing path that matches delay requirements of a class of service of data being transferred; selecting the optimal path based on BER comprises determining the smallest path loss relative to other terminals from which it has received similar messaging; and initiating a request-to-register message in connectivity messaging to register with the closest available other radio terminals for serving as at least a first node of the optimal path in an ad-hoc, peer-to-peer radio system, as specified in independent claim 74.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

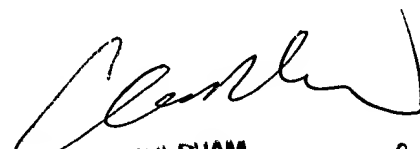
Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

avl


CHI PHAM
SUPERVISORY PATENT EXAMINER
5/1/06